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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/760,379	01/16/2001	Holger Rauth	100564-09055	1266
6449	7590	05/14/2004	EXAMINER	
ROTHWELL, FIGG, ERNST & MANBECK, P.C. 1425 K STREET, N.W. SUITE 800 WASHINGTON, DC 20005			KAM, CHIH MIN	
			ART UNIT	PAPER NUMBER
			1653	
DATE MAILED: 05/14/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/760,379

**Applicant(s)**

RAUTH ET AL.

**Examiner**

Chih-Min Kam

**Art Unit**

1653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2004.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,5-9,11,14 and 15 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1,5-8 and 11 is/are rejected.  
7) ☒ Claim(s) 9,14 and 15 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

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## **DETAILED ACTION**

### ***Status of the Claims***

1. Claims 1, 5-9, 11, 14 and 15 are pending.

Applicants' amendment filed on February 20, 2004 is acknowledged, and applicants' response has been fully considered. Claim 1 has been amended. Thus, claims 1, 5-9, 11, 14 and 15 are examined.

### **Rejection Withdrawn**

#### ***Claim Rejections - 35 USC § 112***

2. The previous rejection of claims 1, 5, 6, 8 and 11 under 35 U.S.C. 102(b) as being anticipated by Guo *et al.* (Disi Junyi Daxue Xuebao 20 (1), 85-88, 1999), is withdrawn in view of applicants' amendment to the claim, and applicants' response at pages 5-8 in the amendment filed February 20, 2004.

3. The previous rejection of claims 1, 5, 6, 8 and 11 under 35 U.S.C. 102(b) as being anticipated by Margel *et al.* (Analytical Biochemistry 128, 342-350 (1983)), is withdrawn in view of applicants' amendment to the claim, and applicants' response at pages 5-8 in the amendment filed February 20, 2004.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1, 5-8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anselmann *et al.* (WO 98/12727, see attached English Translation).

Anselmann *et al.* teach the preparation of monodisperse magnetic particles with a particle size of 50-1500 nm, where a spherical silicon dioxide core is coated with magnetic particles of  $\text{Fe}_3\text{O}_4$  having a maximum particle size of 60 nm and having a cover layer of silicon dioxide, which has free or hydrated OH group on the surface (page 3, paragraphs 4 and 6 of English translation; page 7, paragraph 2; claim 8), and the surface of the magnetic particles can be modified by a silanizing agent of formula (I), which have functional groups (e.g., a hydrophobic group of alkyl C1-6 and a hydrophilic group of COOR) with which reversible binding of the material to be separated to the magnetic particles can be achieved (page 6, paragraph 4-page 7, paragraph 1; claims 1, 5-7 and 11). Although Anselmann *et al.* do not specifically disclose the isolation of the biotinylated protein from aqueous solution, the reference teaches magnetic particles used to isolate nucleic acid, biotin and biotinylated proteins from aqueous solutions, and provides the isolation of DNA, where DNA can be extracted from agarose gel by mixing with magnetic particles in the buffer, removing the remaining liquid from the particles, washing the

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magnetic particles with a buffer at least once, and the magnetic particles are then dried and resuspended in tris-HCl buffer, and the DNA is eluted with a buffer solution which can be separated from the magnetic particles in a magnetic field (page 7, paragraphs 3-5). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to isolate proteins using the procedure for isolating DNA as indicated in the reference because Anselmann *et al.* indicate the magnetic particles modified with a silanizing agent of formula (I) are to be used in the isolation of biotinylated proteins among others from aqueous solutions (claim 5 of the WO document). Thus, the reference suggests the claimed invention and was, as a whole, *prima facie* obvious at the time the claimed invention was made.

5. Claims 9, 14 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

6. Claims 1, 5-8 and 11 are rejected, and claims 9, 14 and 15 are objected to.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chih-Min Kam whose telephone number is (571) 272-0948. The examiner can normally be reached on 8.00-4:30, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Low can be reached on (571) 272-0951. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 308-4227 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

Chih-Min Kam, Ph. D. *CMK*  
Patent Examiner

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May 12, 2004

*Christopher S. F. Low*  
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